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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/553,346

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Kenji Sakamoto

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2292 7590 10/22/2009  
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EXAMINER

INGVOLDSTAD, BENNETT

ART UNIT

PAPER NUMBER

2427

NOTIFICATION DATE

DELIVERY MODE

10/22/2009

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/553,346	<b>Applicant(s)</b> SAKAMOTO, KENJI	
	<b>Examiner</b> Bennett Ingvaldstad	<b>Art Unit</b> 2427	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7, 10-14, 17-23 and 25-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7, 10-14, 17-23 and 25-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Response to Arguments*

Applicant's arguments filed 9 June 2009 have been fully considered. However, they are moot in view of the new rejections.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1–7, 10–14, 17–23, and 25–29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwamura (US 5,883,621) in view of Haines (US 2003/0080992 A1) and Fuji (US 5,831,618).**

Claim 1: Iwamura discloses a display device (integrated receiver decoder 100 in conjunction with TV set 102, fig. 1), comprising:

reception means for receiving data transmitted from a plurality of transmission devices (IRD 100 receives data from DVD 106, VCRs 108, 112, minidisk recorder 110, fig. 1);

display means for displaying information (TV set 102, fig. 1); and

control means for controlling a function of the display device (IRD 100 outputs received signals to the display, figs. 2a–b), wherein the control means includes:

reception state detection means for detecting a state of reception of the reception means (network reception connections are discovered upon startup and when a new node joins the network, fig. 3; col. 4, l. 55 – col. 5, l. 50).

Iwamura does not disclose that the data transmission is a wireless transmission using a degree detection means for detecting the degree of the reception.

Haines teaches a wireless data network for transmitting data between devices (fig. 7 and description) and a network device comprising means for detecting a degree of reception (see signal strength, para. 0021) of the devices on the network in order to determine the devices' location (para. 0021).

It is obvious to make a simple substitution to yield predictable results. Therefore it would have been obvious to have replaced the wired transmission method disclosed by Iwamura with the wireless transmission method disclosed by Haines because both transmission methods yield the predictable result of allowing the transmission of data between networked devices. Haines has the further benefit of allowing detection of the location of a device in the network (para. 0021), thus allowing Iwamura's network map (see Iwamura fig. 6) to be enhanced to indicate the physical locations of the devices (see Haines paras. 0043–0044).

However, the combination of Iwamura and Haines does not teach a network map comprising images indicating a room in which a size of each image is according to the degree of reception regarding the transmission devices in the room.

Fuji teaches a network map comprising images indicating at least one room (see the dotted-line images indicating places including "Computer Room," fig. 6). The size of

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images is according to how many transmission devices are located in each place or room such that images corresponding to places having more devices are larger (fig. 6: compare the size of image 72 having 8 devices to the size of image 70 having 3 devices).

It would have been obvious to use Fuji's hierarchical method for displaying a network map with the network of Iwamura in view of Haines for the purpose of more easily handling maps of large networks (Fuji col. 1, lls. 11–15 & 35–39).

Haines already teaches that the determination of location, and thus which room the device is in, is according to the degree reception means (the location of a device in a facility, para. 0044, is determined using a signal strength measurement, para. 0021). Thus, in the combination, the size of each image is according to how many devices are located in the room indicated by the image (Fuji fig. 6), and whether each device is located in the room is according to the degree of reception of each device (Haines para. 0021, 0042). If A is according to B, and B is according to C, then A is according to C. Therefore, the size of each image is according to the degree of reception of each device in the room indicated by the image, and the claim is already met by Iwamura in view of Haines and Fuji.

Claim 2, dependent on claim 1: Iwamura in view of Haines further discloses wherein the reception state detection means detects the state of reception, based on at least one of electric field strength of a received radio wave and an error ratio of received data (see received signal strength, Haines para. 0021).

Claim 3: Iwamura in view of Haines and Fuji teaches a display device as discussed for claim 1, the reception means further comprising a communication means because the devices communicate bi-directionally (Iwamura fig. 12; Haines para. 0001)

Claim 4 corresponds to claim 2 and is met as such.

Claim 5, dependent on claim 3: Iwamura in view of Haines and Fuji further teaches that the display control means determines a distance from the display device, based on the degree of communication detected by the communication degree detection means (Haines para. 0021), and controls the display means so that the display means displays the room based on the determined distance (using the distance to determine the location, Haines para. 0021, in order to further determine which room the device is in, Haines para. 0043, and display the room accordingly, Fuji fig. 6).

Claim 6, dependent on claim 5: Iwamura in view of Haines further teaches wherein the display control means controls the display means so that the display means displays according to perspective (see Haines fig. 7: a top-down perspective).

Claim 7, dependent on claim 3: Iwamura in view of Haines further discloses wherein the communication degree detection means detects a degree of communication with communication device(s) with which a communication link is established, out of the plurality of communication devices (Haines para. 0021).

Claim 10: Iwamura in view of Haines and Fuji teaches a wireless communication system comprising communication devices and display device as already discussed for claim 1 and further wherein the one or more communication devices include:

communication means for performing wireless communication of data with the display device (see Iwamura fig. 6 in view of Haines' teaching of a wireless network); and

control means for controlling a function of the one or more communication devices (e.g. controlling playback from a device, Iwamura fig. 11);

the control means of the one or more communication devices includes:

communication degree detection means for detecting a degree of communication of the communication means (see Haines para. 0026, 0033: estimating location by gathering signal strength measurements from the network devices), and

communication state transmission means for transmitting, via the communication means, to the display device, the state of communication detected by the communication state detection means (Haines para. 0026, 0033).

Claims 11-14 and correspond to claims 4-7 respectively and are met as such.

Claim 17, dependent on claim 10: Iwamura in view of Haines and Fuji further teaches that there are a plurality of the communication devices (Iwamura fig. 1: DVD 106, VCRs 108, 112, minidisk recorder 110);

the communication means of each of the communication devices performs wireless communication of data with other communication device(s) as well as with the display device (Iwamura fig. 12 in view of Haines' wireless network),

the communication degree detection means of each of the communication devices detects a degree of communication with other communication device(s) as well as with the display device (Haines para. 0026, 0033),

the display control means of the display device controls the display means so that the display means displays the images respectively indicating the room based on the degree of communication of the communication devices acquired by the communication degree acquisition means (using the measured distance to determine the location, Haines para. 0021, in order to further determine which room the device is in, Haines para. 0043, and display the room accordingly, Fuji fig. 6);

Claim 18, dependent on claim 10: Iwamura in view of Haines and Fuji further discloses that there are a plurality of the communication devices (Iwamura fig. 1: DVD 106, VCRs 108, 112, minidisk recorder 110),

the communication means of each of the communication devices performs wireless communication of data with other communication device(s) as well as with the display device (Iwamura fig. 12 in view of Haines' wireless network),

the communication degree detection means of each of the communication devices detects a degree of communication with other communication device(s) (see gathering distance information from other network devices, Haines para. 0026),

the display device further includes communication degree detection means for detecting a degree of communication with each of the communication devices (Haines para. 0026), and

the display control means controls the display means so that the display means displays the images for indicating the room, based on (i) the degree of communication of each of the communication devices acquired by the communication degree acquisition means and (ii) the degree of communication with each of the communication



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devices detected by the communication degree detection means (using the location information gathered from the plurality of network devices, Haines para. 0026, in order to further determine which room the device is in, Haines para. 0043, and display the room accordingly, Fuji fig. 6)

Claims 19 and 20. Iwamura in view of Haines and Fuji further teach a control method for the display devices as discussed in claims 1 and 3 respectively.

Claim 21: Iwamura in view of Haines and Fuji teaches a control method for the wireless communication system discussed in claim 10.

Claim 22, dependent on claim 1: Iwamura in view of Haines and Fuji further discloses a computer readable medium encoded with a display device control program for causing the display device as set forth in claim 1 to function and for causing a computer to function as the control means (program running on display processor).

Claim 23, dependent on claim 1: Iwamura in view of Haines and Fuji further discloses a computer readable medium encoded with a wireless communication system control program for causing a wireless communication system as set forth in claim 10 to function, and for causing a computer to function as control means for both of the communication device and the display device (program running on wireless network interface, Haines para. 0021, connected to IRD 100, Iwamura fig. 1).

Claim 25, dependent on claim 3: Iwamura in view of Haines and Fuji discloses a computer readable medium encoded with a display device control program for causing the display device as set forth in claim 3 to function and for causing a computer to function as the control means (program running on display processor).

Claim 26, dependent on claim 1: Iwamura in view of Haines and Fuji teaches displaying images indicating the room, in which the size of each image is according to average of the degree of reception for the transmission devices in each respective room (the expected location for a transmission device is determined based on the average degree of reception with other devices, Haines para. 0033, the location being used to determine which room the device is in, Haines para. 0043, and display the room accordingly, Fuji fig. 6).

Claim 27, dependent on claim 1: Iwamura in view of Haines and Fuji teaches that the degree of reception corresponds to distance of the transmission device to the reception means (Haines para. 0021).

Claims 28 and 29 correspond to claim 25 and are met as such.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bennett Ingvoldstad whose telephone number is (571) 270-3431. The examiner can normally be reached on M–F 9–5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Scott Beliveau can be reached on (571) 272-7343. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bennett Ingvoldstad/  
Examiner, Art Unit 2427

/Scott Beliveau/  
Supervisory Patent Examiner, Art Unit 2427